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NEWS HOURS

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                     Welcome to STN International
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NEWS
NEWS
         DEC 01
                 ChemPort single article sales feature unavailable
NEWS
         APR 03 CAS coverage of exemplified prophetic substances
                 enhanced
NEWS
     4 APR 07
                 STN is raising the limits on saved answers
NEWS 5 APR 24 CA/Caplus now has more comprehensive patent assignee
                 information
NEWS 6 APR 26 USPATFULL and USPAT2 enhanced with patent
                 assignment/reassignment information
NEWS 7 APR 28 CAS patent authority coverage expanded
NEWS 8 APR 28
                 ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 9 APR 28 Limits doubled for structure searching in CAS
                 REGISTRY
NEWS 10 MAY 08
                 STN Express, Version 8.4, now available
NEWS 11 MAY 11
                 STN on the Web enhanced
NEWS 12
         MAY 11
                 BEILSTEIN substance information now available on
                 STN Easy
                 DGENE, PCTGEN and USGENE enhanced with increased
NEWS 13
         MAY 14
                 limits for exact sequence match searches and
                 introduction of free HIT display format
NEWS 14
         MAY 15 INPADOCDB and INPAFAMDB enhanced with Chinese legal
                 status data
NEWS 15
         MAY 28 CAS databases on STN enhanced with NANO super role in
                 records back to 1992
NEWS 16
         JUN 01 CAS REGISTRY Source of Registration (SR) searching
                 enhanced on STN
NEWS 17
         JUN 26 NUTRACEUT and PHARMAML no longer updated
NEWS 18
         JUN 29
                 IMSCOPROFILE now reloaded monthly
NEWS 19
         JUN 29
                 EPFULL adds Simultaneous Left and Right Truncation
                 (SLART) to AB, MCLM, and TI fields
NEWS 20
         JUL 09
                 PATDPAFULL adds Simultaneous Left and Right
                 Truncation (SLART) to AB, CLM, MCLM, and TI fields
NEWS 21
         JUL 14
                 USGENE enhances coverage of patent sequence location
                 (PSL) data
NEWS 22
         JUL 14 CA/CAplus to be enhanced with new citing references
                 features
                GBFULL adds patent backfile data to 1855
NEWS 23
         JUL 16
NEWS 24
         JUL 21 USGENE adds bibliographic and sequence information
NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
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AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.22
0.22

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=> d scan

L3 2 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN Propanamide, N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-

MF C22 H28 N2 O CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

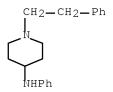
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 2 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN 4-Piperidinamine, N-phenyl-1-(2-phenylethyl)-

MF C19 H24 N2

CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> fil caplu
COST IN U.S. DOLLARS

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.96
1.18

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FILE COVERS 1907 - 23 Jul 2009 VOL 151 ISS 4

FILE LAST UPDATED: 22 Jul 2009 (20090722/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

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=> s 13 L45012 L3 => s 14 and (large scale) 1374370 LARGE 70 LARGES 1374419 LARGE (LARGE OR LARGES) 490512 SCALE 79806 SCALES 542800 SCALE (SCALE OR SCALES) 98055 LARGE SCALE (LARGE(W)SCALE) L5 8 L4 AND (LARGE SCALE)

=> 15 and hplc

L5 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> s 15 and hplc 222596 HPLC 46 HPLCS 222622 HPLC (HPLC OR HPLCS) L6 0 L5 AND HPLC => d scan 15

L5 8 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN CC 1-11 (Pharmacology)

- TI Comparing efficacy and safety of four intravenous sedation regimens in dental outpatients
- ST dental surgery sedative midazolam fentanyl methohexital
- IT Analgesics

Anxiolytics

Hypnotics and Sedatives

(comparing efficacy and safety of four i.v. sedation regimens in human dental outpatients)

IT 151-83-7, Methohexital 437-38-7, Fentanyl 59467-70-8,

Midazolam

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(comparing efficacy and safety of four i.v. sedation regimens in human dental outpatients)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L5 8 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
- CC 1-12 (Pharmacology)
- TI Effect of concomitant use of benzodiazepines and other drugs on the risk of injury in a veterans population
- ST benzodiazepine azole antifungal barbiturate centrally acting muscle relaxant injury; opioid analgesic
- IT Combination chemotherapy

Human

Human groups

Injury

(concomitant use of benzodiazepines with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)

IT Analgesics

(concomitant use of benzodiazepines with opioid analgesics codeine, dextropropoxyphene, fentanyl, hydrocodone, hydromorphone, methadone, morphine, oxycodone, pethidine increased risk of injury in population of Veterans Administration patient)

IT 28981-97-7, Alprazolam

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine alprazolam with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)

IT 58-25-3, Chlordiazepoxide

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine chlordiazepoxide with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)

IT 1622-61-3, Clonazepam

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine clonazepam with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)

IT 439-14-5, Diazepam

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological

- activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine diazepam with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)
- IT 57109-90-7, Dipotassium clorazepate
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine dipotassium clorazepate with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)
- IT 17617-23-1, Flurazepam
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine flurazepam with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)
- IT 846-49-1, Lorazepam
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine lorazepam with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)
- IT 604-75-1, Oxazepam
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine oxazepam with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)
- IT 846-50-4, Temazepam
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine temazepam with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)
- IT 28911-01-5, Triazolam
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepine triazolam with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)
- IT 12794-10-4, Benzodiazepine
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (concomitant use of benzodiazepines with azole antifungals, barbiturates, centrally acting muscle relaxants or opioid analgesics increased risk of injury in population of Veterans Administration patient)
- IT 78-44-4, Carisoprodol
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
 activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (concomitant use of benzodiazepines with carisoprodol increased risk of
 injury in population of Veterans Administration patient)
- IT 302-17-0, Chloral hydrate

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RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with chloral hydrate increased risk
   of injury in population of Veterans Administration patient)
95-25-0, Chlorzoxazone
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with chlorzoxazone increased risk
   of injury in population of Veterans Administration patient)
23593-75-1, Clotrimazole
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with clotrimazole increased risk of
   injury in population of Veterans Administration patient)
76-57-3, Codeine
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with codeine increased risk of
   injury in population of Veterans Administration patient)
303-53-7, Cyclobenzaprine
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with cyclobenzaprine increased risk
   of injury in population of Veterans Administration patient)
469-62-5, Dextropropoxyphene
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with dextropropoxyphene increased
   risk of injury in population of Veterans Administration patient)
437-38-7, Fentanyl
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with fentanyl increased risk of
   injury in population of Veterans Administration patient)
86386-73-4, Fluconazole
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with fluconazole increased risk of
   injury in population of Veterans Administration patient)
125-29-1, Hydrocodone
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with hydrocodone increased risk of
   injury in population of Veterans Administration patient)
466-99-9, Hydromorphone
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with hydromorphone increased risk
   of injury in population of Veterans Administration patient)
84625-61-6, Itraconazole
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with itraconazole increased risk of
   injury in population of Veterans Administration patient)
65277-42-1, Ketoconazole
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (concomitant use of benzodiazepines with ketoconazole increased risk of
   injury in population of Veterans Administration patient)
76-99-3, Methadone
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RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with methadone increased risk of
        injury in population of Veterans Administration patient)
     532-03-6, Methocarbamol
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with methocarbamol increased risk
        of injury in population of Veterans Administration patient)
     57-27-2, Morphine, biological studies
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with morphine increased risk of
        injury in population of Veterans Administration patient)
     76-42-6, Oxycodone
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with oxycodone increased risk of
        injury in population of Veterans Administration patient)
     359-83-1, Pentazocine
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with pentazocine increased risk of
        injury in population of Veterans Administration patient)
     57-42-1, Pethidine
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with pethidine increased risk of
        injury in population of Veterans Administration patient)
     50-06-6, Phenobarbital, biological studies
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with phenobarbital increased risk
        of injury in population of Veterans Administration patient)
     125-33-7, Primidone
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with primidone increased risk of
        injury in population of Veterans Administration patient)
     51322-75-9, Tizanidine
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (concomitant use of benzodiazepines with tizanidine increased risk of
        injury in population of Veterans Administration patient)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
      8 ANSWERS
                 CAPLUS COPYRIGHT 2009 ACS on STN
     64-1 (Pharmaceutical Analysis)
     Systematic troubleshooting for LC/MS/MS Part 1: Sample preparation and
     chromatography
     sample prepn mass spectrometry liq chromatog; trouble shooting technique
     LC MS
    Mass spectrometry
        (liquid chromatog. combined with; sample preparation and anal. of drugs in
        human blood by LC/MS)
     Liquid chromatography
        (mass spectrometry combined with; sample preparation and anal. of drugs in
        human blood by LC/MS)
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Blood analysis

Sample preparation

(sample preparation and anal. of drugs in human blood by LC/MS)

IT 139755-82-1, Desmethylsildenafil

RL: ANT (Analyte); ANST (Analytical study)

(desmethylsildenafil; sample preparation and anal. of drugs in human blood by LC/MS)

ΙT 54-11-5, Nicotine 57-27-2, Morphine, analysis 76-41-5, Oxymorphone 76-42-6, Oxycodone 90-82-4, Pseudoephedrine 125-29-1, Hydrocodone 437-38-7, Fentanyl 466-99-9, Hydromorphone 486-56-6, Cotinine 3703-79-5, Bamethan 4205-90-7, Clonidine 18559-94-9, Albuterol 20290-09-9, Morphine-3-glucuronide 20290-10-2, Morphine-6-glucuronide 28911-01-5, Triazolam 36791-04-5, Ribavirin 54910-89-3, Fluoxetine 57664-96-7, Noroxycodone 59467-70-8, Midazolam 59468-85-8, 4-Hydroxymidazolam 59468-90-5, 1-Hydroxymidazolam 61869-08-7, Paroxetine 65277-42-1, Ketoconazole 73590-58-6, Omeprazole 79617-96-2, Sertraline 79794-75-5, Loratadine 83799-24-0, Fexofenadine 83891-03-6, Norfluoxetine 86386-73-4, Fluconazole 87857-41-8, Desmethylsertraline 100643-71-8, Descarboethoxyloratadine 122320-73-4, Rosiglitazone 127779-20-8, Saquinavir 139755-83-2, Sildenafil 150378-17-9, Indinavir 155213-67-5, Ritonavir 159989-64-7, Nelfinavir 161814-49-9, Amprenavir RL: ANT (Analyte); ANST (Analytical study)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L5 8 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
- CC 1-11 (Pharmacology)
- TI Predicting long-term response to strong opioids in patients with low back pain: findings from a randomized, controlled trial of transdermal fentanyl and morphine

(sample preparation and anal. of drugs in human blood by LC/MS)

- ST opioid back pain fentanyl morphine analgesic
- IT Aging, animal

(age did not predict response to transdermal fentanyl and sustained-release oral morphine in patient with chronic low back pain)

IT Pain

(back; high dose of opioids and employment status predicted response to transdermal fentanyl and sustained-release oral morphine in patient with chronic low back pain)

IT Analgesics

(high dose of opioids and employment status predicted response to analgesic transdermal fentanyl and sustained-release oral morphine in patient with chronic low back pain)

IT Human

Oral drug delivery systems

Prognosis

Transdermal drug delivery systems

(high dose of opioids and employment status predicted response to transdermal fentanyl and sustained-release oral morphine in patient with chronic low back pain)

IT Opioids

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(high dose of opioids and employment status predicted response to transdermal fentanyl and sustained-release oral morphine in patient with chronic low back pain)

IT Pain

(neuropathic pain; neuropathic pain predicted response to transdermal fentanyl and sustained-release oral morphine in patient with chronic low back pain)

ΙT 57-27-2, Morphine, biological studies 437-38-7, Fentanyl RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (high dose of opioids and employment status predicted response to transdermal fentanyl and sustained-release oral morphine in patient with chronic low back pain) HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1 CAPLUS COPYRIGHT 2009 ACS on STN L58 ANSWERS CC 9-16 (Biochemical Methods) Section cross-reference(s): 1 Systematic troubleshooting for LC/MS/MS ΤI sample prepn mass spectrometry liq chromatog; trouble shooting LC MS blood ST drug analysis ΙT Blood analysis Sample preparation Urine analysis (anal. of drugs in blood and urine by LC/MS/MS and troubleshooting techniques) ΙT Mass spectrometry Tandem mass spectrometry (liquid chromatog. combined with; anal. of drugs in blood and urine by LC/MS/MS and troubleshooting techniques) Liquid chromatography TΤ (mass spectrometry combined with; anal. of drugs in blood and urine by LC/MS/MS and troubleshooting techniques) 54-11-5, Nicotine 57-27-2, Morphine, analysis 76-41-5, Oxymorphone ΤТ 76-42-6, Oxycodone 90-82-4, Pseudoephedrine 125-29-1, Hydrocodone 437-38-7, Fentanyl 466-99-9, Hydromorphone 486-56-6, Cotinine 3703-79-5, Bamethan 4205-90-7, Clonidine 18559-94-9, Albuterol 20290-09-9, Morphine-3-glucuronide 20290-10-2, Morphine-6-glucuronide 28911-01-5, Triazolam 36791-04-5, Ribavirin 54910-89-3, Fluoxetine 57664-96-7, Noroxycodone 59467-70-8, Midazolam 59468-85-8, 4-Hydroxy-midazolam 59468-90-5, 1-Hydroxy-midazolam 61869-08-7, Paroxetine 65277-42-1, Ketoconazole 73590-58-6, Omeprazole 79617-96-2, Sertraline 79794-75-5, Loratadine 83799-24-0, Fexofenadine 83891-03-6, Norfluoxetine 86386-73-4, Fluconazole 87857-41-8, Desmethyl-sertraline 100643-71-8, Descarboethoxy-loratadine 122320-73-4, Rosiglitazone 127779-20-8, Saquinavir 139755-83-2, 155213-67-5, Ritonavir 150378-17-9, Indinavir Sildenafil 159989-64-7, Nelfinavir 161814-49-9, Amprenavir RL: ANT (Analyte); ANST (Analytical study) (anal. of drugs in blood and urine by LC/MS/MS and troubleshooting techniques) 139755-82-1, Desmethylsildenafil TΤ RL: ANT (Analyte); ANST (Analytical study) (desmethylsildenafil; anal. of drugs in blood and urine by LC/MS/MS and troubleshooting techniques) HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1 L5 8 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN CC 1-11 (Pharmacology) ΤI Hemodynamics and emergence profile of remifentanil versus fentanyl prospectively compared in a large population of surgical patients ST remifentanil fentanyl anesthesia hemodynamics

ΙΤ

Blood pressure Heart rate Human

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(remifentanil vs. fentanyl hemodynamics and recovery)
ΙT
     437-38-7, Fentanyl 132875-61-7, Remifentanil
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (remifentanil vs. fentanyl hemodynamics and recovery)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L5
      8 ANSWERS
                 CAPLUS COPYRIGHT 2009 ACS on STN
     27-16 (Heterocyclic Compounds (One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
     Process for preparing alvimopan and their compositions containing opioid
ΤI
     antagonists
     alvimopan compn opioid antagonist process
ST
ΙT
    Abdominal pain
        (colic, treatment of; preparation of alvimopan and its metabolites, their
        compns. and use as opioid antagonists)
ΙT
     Intestine, disease
        (opioid bowel dysfunction, treatment of; preparation of alvimopan and its
        metabolites, their compns. and use as opioid antagonists)
ΙT
     Ileus
        (postpartum, treatment of; preparation of alvimopan and its metabolites,
        their compns. and use as opioid antagonists)
ΙT
     Antiemetics
     Dissolution
     Human
     Opioid antagonists
     Pharmaceutical capsules
     Pharmaceutical excipients
     Pharmaceutical tablets
        (preparation of alvimopan and its metabolites, their compns. and use as
        opioid antagonists)
ΙT
     Opioids
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (preparation of alvimopan and its metabolites, their compns. and use as
        opioid antagonists)
TT
     Urinary system disease
        (retention, treatment of; preparation of alvimopan and its metabolites,
        their compns. and use as opioid antagonists)
ΙT
    Muscle, disease
        (spasm, biliary, treatment of; preparation of alvimopan and its
metabolites,
        their compns. and use as opioid antagonists)
TΤ
     Tleus
    Nausea
     Pruritus
     Vomiting
        (treatment of; preparation of alvimopan and its metabolites, their compns.
        and use as opioid antagonists)
ΙT
     156053-89-3P, Alvimopan
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); PRP
     (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (preparation of alvimopan and its metabolites, their compns. and use as
        opioid antagonists)
     170098-38-1P, Alvimopan dihydrate
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
```

(preparation of alvimopan and its metabolites, their compns. and use as opioid antagonists) ΙT 144124-40-3P RL: IMF (Industrial manufacture); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of alvimopan and its metabolites, their compns. and use as opioid antagonists) 4629-80-5P, 1,3-Dimethylpiperidin-4-one 119193-19-0P 131738-73-3P, ΙT 3-Isopropoxyphenyl bromide 156130-41-5P 170098-28-9P 172376-39-5P RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of alvimopan and its metabolites, their compns. and use as opioid antagonists) 57-27-2, Morphine, biological studies 57-42-1, Meperidine 76-41-5, ΤТ Oxymorphone 76-42-6, Oxycodone 76-57-3, Codeine 76-99-3, Methadone 77-07-6, Levorphanol 125-28-0, Dihydrocodeine 125-29-1, Hydrocodone 359-83-1, Pentazocine 437-38-7, Fentanyl 466-99-9, Hydromorphone 469-62-5, Propoxyphene 15686-91-6, Propiram 20594-83-6, Nalbuphine 27203-92-5, Tramadol 42408-82-2, Butorphanol 52485-79-7, Buprenorphine 53648-55-8, Dezocine 56030-54-7, Sufentanil 71195-58-9, Alfentanil RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of alvimopan and its metabolites, their compns. and use as opioid antagonists) 75-26-3, Isopropyl bromide 96-33-3, Methyl acrylate 100-39-0, Benzyl ΙT 541-41-3, Ethyl chloroformate 591-20-8, 3-Bromophenol bromide 623-33-6, Glycine ethyl ester hydrochloride RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of alvimopan and its metabolites, their compns. and use as opioid antagonists) 50-99-7, Dextrose, biological studies 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 63-42-3, Lactose 69-65-8, Mannitol 9050-36-6, Maltodextrin 66828-18-0, Dextrate RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of alvimopan and its metabolites, their compns. and use as opioid antagonists) HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1 8 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN L5CC 64-1 (Pharmaceutical Analysis) ΤI Systematic troubleshooting for LC/MS/MS Part 2: Largescale LC/MS/MS and automation ST drug analysis mass spectrometry liq chromatog ΙΤ Mass spectrometry (liquid chromatog. combined with; systematic troubleshooting for LC/MS/MS for large-scale samples and automation) ΙΤ Liquid chromatography (mass spectrometry combined with; systematic troubleshooting for LC/MS/MS for large-scale samples and automation) Liquid chromatography ΙT Pharmaceutical analysis Tandem mass spectrometry (systematic troubleshooting for LC/MS/MS for largescale samples and automation) ΙT 437-38-7, Fentanyl 36791-04-5, Ribavirin 86386-73-4, Fluconazole

RL: ANT (Analyte); ANST (Analytical study)

(systematic troubleshooting for LC/MS/MS for large-scale samples and automation)

ALL ANSWERS HAVE BEEN SCANNED

```
=> d his
     (FILE 'HOME' ENTERED AT 15:25:12 ON 23 JUL 2009)
     FILE 'REGISTRY' ENTERED AT 15:25:31 ON 23 JUL 2009
              1 S 437-38-7/RN
L1
L2
              1 S 21409-26-7/RN
T.3
              2 S L1 OR L2
     FILE 'CAPLUS' ENTERED AT 15:26:37 ON 23 JUL 2009
L4
           5012 S L3
L5
              8 S L4 AND (LARGE SCALE)
              0 S L5 AND HPLC
L6
=> s 14 and (process or preparation)
       2830507 PROCESS
       1956481 PROCESSES
       4236811 PROCESS
                 (PROCESS OR PROCESSES)
       1718859 PREPARATION
         86972 PREPARATIONS
       1800936 PREPARATION
                 (PREPARATION OR PREPARATIONS)
       3049028 PREPN
       219740 PREPNS
       3213941 PREPN
                 (PREPN OR PREPNS)
       4145475 PREPARATION
                (PREPARATION OR PREPN)
L7
           606 L4 AND (PROCESS OR PREPARATION)
=> s 17 and hplc
        222596 HPLC
            46 HPLCS
        222622 HPLC
                 (HPLC OR HPLCS)
L8
            19 L7 AND HPLC
=> d scan
Γ8
      19 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
CC
     64-3 (Pharmaceutical Analysis)
ΤТ
     Quality evaluation and standardization of fentanyl and the related
     injection preparation
ST
     fentanyl injection quality control HPLC; liq chromatog fentanyl
     detn injection
     HPLC
ΙT
     Quality control
        (quality evaluation and determination of fentanyl in injection solns.)
TΤ
     437-38-7, Fentanyl
     RL: ANT (Analyte); ANST (Analytical study)
        (quality evaluation and determination of fentanyl in injection solns.)
```

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

```
L8
     19 ANSWERS
                 CAPLUS COPYRIGHT 2009 ACS on STN
CC
     4-2 (Toxicology)
     Section cross-reference(s): 1
ΤI
     Development of a qualitative liquid chromatography/tandem mass
     spectrometric method for the detection of narcotics in urine relevant to
     doping analysis
     liq chromatog tandem mass spectrometry narcotic urine doping; HPLC
ST
    MS narcotic detection urine doping analysis
ΙΤ
     Drugs of abuse
    Forensic analysis
ΙT
      HPLC
     Narcotics
     Tandem mass spectrometry
     Urine analysis
        (development of qual. liquid chromatog./tandem mass spectrometric method
        for detection of narcotics in urine relevant to doping anal.)
     Substance abuse
ΙT
        (doping)
ΙΤ
    Mass spectrometry
        (liquid chromatog. combined with; development of qual. liquid
        chromatog./tandem mass spectrometric method for detection of narcotics
        in urine relevant to doping anal.)
ΙT
     Liquid chromatography
        (mass spectrometry combined with; development of qual. liquid
        chromatog./tandem mass spectrometric method for detection of narcotics
        in urine relevant to doping anal.)
     57-27-2, Morphine, analysis
                                  57-42-1, Pethidine 62-67-9, Nalorphine
ΙT
                                               76-57-3, Codeine
     76-41-5, Oxymorphone
                          76-42-6, Oxycodone
                                                                   76-58-4,
     Ethylmorphine
                    76-99-3, Methadone 125-29-1, Hydrocodone
     Dextromoramide 359-83-1, Pentazocine 437-38-7, Fentanyl
     466-99-9, Hydromorphone 467-85-6, Normethadone
                                                        2784-73-8, 6MAM
     17109-49-8, EDDP
                       42408-82-2, Butorphanol 52485-79-7, Buprenorphine
     78715-23-8, Norbuprenorphine
     RL: ANT (Analyte); ANST (Analytical study)
        (development of qual. liquid chromatog./tandem mass spectrometric method
        for detection of narcotics in urine relevant to doping anal.)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
                  CAPLUS COPYRIGHT 2009 ACS on STN
L8
     19 ANSWERS
CC
     1-1 (Pharmacology)
     Section cross-reference(s): 4
TΤ
     Improved radioreceptor assay of opiate narcotics in human serum:
     application to fentanyl and morphine metabolism
ST
     opiate narcotic radioreceptor assay blood; fentanyl blood radioreceptor
     assay; morphine blood radioreceptor assay
ΙT
     Opiates and Opioids
     RL: ANST (Analytical study)
        (determination of metabolites and, in blood of humans by radioreceptor
assay)
ΙT
     Blood analysis
        (opiate narcotics and metabolites determination in human, by radioreceptor
        assay)
TΤ
     Radiochemical analysis
        (receptor-binding, for opiate narcotics and metabolites determination in
blood
        of humans)
     57-27-2, Morphine, analysis 437-38-7, Fentanyl
ΙT
```

```
RL: ANST (Analytical study)
        (determination of metabolites and, in blood of humans by radioreceptor
assay)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end
=> d his
     (FILE 'HOME' ENTERED AT 15:25:12 ON 23 JUL 2009)
     FILE 'REGISTRY' ENTERED AT 15:25:31 ON 23 JUL 2009
              1 S 437-38-7/RN
L1
L2
              1 S 21409-26-7/RN
T.3
              2 S L1 OR L2
     FILE 'CAPLUS' ENTERED AT 15:26:37 ON 23 JUL 2009
L4
           5012 S L3
              8 S L4 AND (LARGE SCALE)
L5
              0 S L5 AND HPLC
L6
L7
            606 S L4 AND (PROCESS OR PREPARATION)
L8
             19 S L7 AND HPLC
=> s 18 and (py<2004 or ay<2004 or pry<2004)
      24035998 PY<2004
       4802063 AY<2004
       4275032 PRY<2004
             7 L8 AND (PY<2004 OR AY<2004 OR PRY<2004)
L9
=> d scan
L9
      7 ANSWERS
                  CAPLUS COPYRIGHT 2009 ACS on STN
CC
     1-1 (Pharmacology)
     Section cross-reference(s): 4
TΙ
     Improved radioreceptor assay of opiate narcotics in human serum:
     application to fentanyl and morphine metabolism
     opiate narcotic radioreceptor assay blood; fentanyl blood radioreceptor
ST
     assay; morphine blood radioreceptor assay
     Opiates and Opioids
TΤ
     RL: ANST (Analytical study)
        (determination of metabolites and, in blood of humans by radioreceptor
assay)
ΤТ
     Blood analysis
        (opiate narcotics and metabolites determination in human, by radioreceptor
        assav)
TΤ
     Radiochemical analysis
        (receptor-binding, for opiate narcotics and metabolites determination in
blood
        of humans)
     57-27-2, Morphine, analysis 437-38-7, Fentanyl
TT
     RL: ANST (Analytical study)
        (determination of metabolites and, in blood of humans by radioreceptor
assay)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L9
     7 ANSWERS
                  CAPLUS COPYRIGHT 2009 ACS on STN
CC
     63-6 (Pharmaceuticals)
     Preparation of biodegradable PLGA microspheres for sustained
ΤI
     local anesthesia and their in vitro release behavior
ST
     fentanyl encapsulation PLGA microsphere local anesthesia
```

```
Gelatins, biological studies
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (as surfactants; biodegradable PLGA microspheres for sustained local
        anesthesia and their in vitro release behavior)
ΙΤ
     Dissolution rate
        (biodegradable PLGA microspheres for sustained local anesthesia and
        their in vitro release behavior)
     Polyesters, biological studies
ΤТ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (dilactone-based; biodegradable PLGA microspheres for sustained local
        anesthesia and their in vitro release behavior)
ΙT
     Anesthetics
        (local; biodegradable PLGA microspheres for sustained local anesthesia
        and their in vitro release behavior)
ΤТ
     Drug delivery systems
        (microspheres; biodegradable PLGA microspheres for sustained local
        anesthesia and their in vitro release behavior)
ΙT
     437-38-7, Fentanyl
     RL: BPR (Biological process); BSU (Biological study, unclassified); THU
     (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (biodegradable PLGA microspheres for sustained local anesthesia)
     30846-39-0, L-Lactide-glycolide copolymer
ΤT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (biodegradable PLGA microspheres for sustained local anesthesia and
        their in vitro release behavior)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L9
     7 ANSWERS
                 CAPLUS COPYRIGHT 2009 ACS on STN
IC
     ICM C07D211-58
     ICS B01D015-08
CC
     48-1 (Unit Operations and Processes)
     Section cross-reference(s): 27, 45, 63
ΤI
     Industrial method for separation and purification of fentanyl by
    reverse-phase preparative chromatography
     fentanyl purifn reverse phase HPLC
ST
    Acids, preparation
ΙΤ
     RL: IMF (Industrial manufacture); PUR (Purification or recovery); PREP
     (Preparation)
        (fentanyl salts; industrial method for separation and purification of
fentanyl by
       reverse-phase preparative chromatog. with acid salification via
        neutralization)
ΙT
     Reversed phase HPLC stationary phases
        (in an industrial method for separation and purification of fentanyl by
        reverse-phase preparative chromatog.)
     Reversed phase HPLC
ΤТ
        (industrial method for separation and purification of fentanyl by reverse-
phase
       preparative chromatog.)
ΙT
    Neutralization
        (industrial method for separation and purification of fentanyl by reverse-
phase
        preparative chromatog. with acid salification via)
TΤ
     Alcohols, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (solvents; in an industrial method for separation and purification of
fentanyl by
        reverse-phase preparative chromatog.)
ΙT
     50-21-5, Lactic acid, reactions
                                      110-15-6, Succinic acid, reactions
```

```
144-62-7, Oxalic acid, reactions 7664-38-2, Phosphoric acid, reactions
     7664-93-9, Sulfuric acid, reactions 13598-36-2, Phosphorous acid,
     reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (in an industrial method for separation and purification of fentanyl by
        reverse-phase preparative chromatog.)
ΙT
     1443-54-5P, Fentanyl hydrochloride
     RL: PEP (Physical, engineering or chemical process); PUR (Purification or
     recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
        (industrial method for separation and purification of fentanyl by reverse-
phase
        preparative chromatog.)
     437-38-7P, Fentanyl
ΙT
     RL: PEP (Physical, engineering or chemical process); PUR (Purification or
     recovery); PYP (Physical process); RCT (Reactant); PREP (Preparation);
     PROC (Process); RACT (Reactant or reagent)
        (industrial method for separation and purification of fentanyl by reverse-
phase
        preparative chromatog.)
     64-18-6, Formic acid, reactions 64-19-7, Acetic acid, reactions
ΙΤ
     87-69-4, Tartaric acid, reactions 7647-01-0, Hydrochloric acid,
                 7697-37-2, Nitric acid, reactions 10035-10-6, Hydrogen
     reactions
     bromide, reactions
     RL: RCT (Reactant); RGT (Reagent); RACT (Reactant or reagent)
        (industrial method for separation and purification of fentanyl by reverse-
phase
        preparative chromatog.)
     75-05-8, Acetonitrile, uses
                                  75-65-0, tert-Butanol, uses
ΤТ
     RL: NUU (Other use, unclassified); USES (Uses)
        (solvent; industrial method for separation and purification of fentanyl by
        reverse-phase preparative chromatog.)
     7631-86-9D, Silica, silanized products
ΤТ
     RL: NUU (Other use, unclassified); USES (Uses)
        (stationary phase; in an industrial method for separation and purification
of
        fentanyl by reverse-phase preparative chromatog.)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
     7 ANSWERS
                CAPLUS COPYRIGHT 2009 ACS on STN
L9
     64-3 (Pharmaceutical Analysis)
CC
     Section cross-reference(s): 63
ΤI
     Development and validation of an MPLC assay for fentanyl and
     related substances in fentanyl citrate injection, USP
ST
     RPLC detn fentanyl injection; liq chromatog detn fentanyl
     injection; stability HPLC detn fentanyl injection
ΙΤ
     Decomposition
     Photolysis
     Reversed phase HPLC
        (APLC determination of fentanyl and related substances in fentanyl
        citrate injection)
     103-63-9, 2-Bromoethylbenzene 437-38-7, Fentanyl 1155-56-2,
TΤ
     4-Anilino-1-benzylpiperidine
                                  1474-02-8 1609-66-1,
     N-Phenyl-N-(4-piperidinyl)propionamide 1796-40-3 3258-84-2
     21409-26-7 23056-29-3, 4-Anilinopiperidine
     RL: ANT (Analyte); ANST (Analytical study)
        (HPLC determination of fentanyl and related substances in fentanyl
        citrate injection)
     990-73-8, Fentanyl citrate
ΙT
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
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(Uses)
        (HPLC determination of fentanyl and related substances in fentanyl
        citrate injection)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L9
     7 ANSWERS
                  CAPLUS COPYRIGHT 2009 ACS on STN
CC
     1-1 (Pharmacology)
     Section cross-reference(s): 63
ΤI
     Chromatographic approach for determining the relative membrane
     permeability of drugs
     opioid permeability biol membrane diffusion coeff hydrophobicity;
ST
     HPLC model drug diffusion cell membrane diffusion coeff
     hydrophobicity
    Cell membrane
ΤT
     Drugs
      HPLC
    Membrane, biological
     Permeability
     Simulation and Modeling
        (HPLC model for determining the relative membrane permeability of
        drugs)
     Diffusion
ΤТ
        (HPLC model for determining the relative membrane permeability of
        drugs by measuring)
ΙT
     Hydrophobicity
     Lipophilicity
        (MPLC model for determining the relative membrane permeability of
        drugs in relation to)
ΙT
     Opioids
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); PRP (Properties); PYP (Physical process); PROC (Process)
        (HPLC model for determining the relative membrane permeability of
        drugs such as)
     57-42-1, Meperidine 437-38-7, Fentanyl 56030-54-7, Sufentanil
TΤ
     71195-58-9, Alfentanil
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); PRP (Properties); PYP (Physical process); PROC (Process)
        (APLC model for determining the relative membrane permeability of
        drugs such as)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L9
      7 ANSWERS
                 CAPLUS COPYRIGHT 2009 ACS on STN
CC
     63-5 (Pharmaceuticals)
     Section cross-reference(s): 64
ΤI
     Formulation and shelf-life of a fentanyl injection
ST
     fentanyl injection formulation stability
ΙΤ
    Kinetics of hydrolysis
        (of fentanyl, in injections)
ΙT
     Adsorption
        (of fentanyl, on filters)
     Pharmaceutical dosage forms
ΙT
        (injections, fentanyl stability in)
     437-38-7, Fentanyl
                          990-73-8
TΤ
     RL: BIOL (Biological study)
        (injections, formulation and stability of)
```

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

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L9
     7 ANSWERS
                  CAPLUS COPYRIGHT 2009 ACS on STN
CC
    1-2 (Pharmacology)
ΤI
    Individual variations in the elimination process of fentanyl in
     patients
ST
     fentanyl elimination variation
ΙT
     Blood analysis
     Narcotics
     Urine analysis
        (individual variations in elimination process of fentanyl in
        patients)
TΤ
     Drug metabolism
        (individual variations in elimination process of fentanyl in
        relation to CYP3A4 in)
     1609-66-1, Norfentanyl
ТТ
     RL: BPR (Biological process); BSU (Biological study, unclassified); MFM
     (Metabolic formation); BIOL (Biological study); FORM (Formation,
     nonpreparative); PROC (Process)
        (fentanyl metabolite; individual variations in elimination
        process of fentanyl in patients)
     437-38-7, Fentanyl
ΤТ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (individual variations in elimination process of fentanyl in
        patients)
     329736-03-0, cytochrome P 450 3A4
TΤ
     RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological
     study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC
     (Process)
        (individual variations in elimination process of fentanyl in
        relation to CYP3A4 in)
     50-23-7, Cortisol 53-35-0, 6\beta-Hydroxycortisol
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (individual variations in elimination process of fentanyl in
        relation to CYP3A4 in)
ALL ANSWERS HAVE BEEN SCANNED
=> s industrial
        310179 INDUSTRIAL
           114 INDUSTRIALS
        310253 INDUSTRIAL
T.10
                 (INDUSTRIAL OR INDUSTRIALS)
=> s (large scale)
       1374370 LARGE
            70 LARGES
       1374419 LARGE
                 (LARGE OR LARGES)
        490512 SCALE
         79806 SCALES
        542800 SCALE
                 (SCALE OR SCALES)
L11
         98055 (LARGE SCALE)
                 (LARGE(W)SCALE)
=> s (process or preparation)
       2830507 PROCESS
       1956481 PROCESSES
```

```
4236811 PROCESS
```

(PROCESS OR PROCESSES)

SYSTEM LIMITS EXCEEDED - SEARCH ENDED

The search profile you entered was too complex or gave too many answers. Simplify or subdivide the query and try again. If you have exceeded the answer limit, enter DELETE HISTORY at an arrow prompt (=>) to remove all previous answers sets and begin at L1. Use the SAVE command to store any important profiles or answer sets before using DELETE HISTORY.

=> s 110 or 111

L12 404445 L10 OR L11

=> s (process or preparation) and 112

2830507 PROCESS

1956481 PROCESSES

4236811 PROCESS

(PROCESS OR PROCESSES)

1718859 PREPARATION

86972 PREPARATIONS

1800936 PREPARATION

(PREPARATION OR PREPARATIONS)

3049028 PREPN

219740 PREPNS

3213941 PREPN

(PREPN OR PREPNS)

4145475 PREPARATION

(PREPARATION OR PREPN)

L13 159874 (PROCESS OR PREPARATION) AND L12

=> s kilolab

L14 1 KILOLAB

=> d scan

L14 1 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN

CC 47-3 (Apparatus and Plant Equipment)

Section cross-reference(s): 48

- TI Evaluation of microwave reactors for prep-scale synthesis in a kilolab
- ST microwave reactor org reaction prep scale synthesis kilolab
- IT Microwave

(evaluation of microwave reactors for prep-scale synthesis in kilolab)

IT Reactors

(microwave; evaluation of microwave reactors for prep-scale synthesis in kilolab)

IT Reaction

(organic; evaluation of microwave reactors for prep-scale synthesis in kilolab)

ALL ANSWERS HAVE BEEN SCANNED

=> s 113 and hplc

222596 HPLC

46 HPLCS

222622 HPLC

(HPLC OR HPLCS)

L15 992 L13 AND HPLC

```
=> d scan
T.15
     992 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
CC
     34-3 (Amino Acids, Peptides, and Proteins)
    Method for solid-phase synthesis of ZP120 peptide
ST
     ZP120 solid phase peptide synthesis
ΙT
     Reversed phase HPLC
        (C18; solid-phase synthesis of ZP120 peptide)
ΙT
     Solid phase synthesis
        (peptide; solid-phase synthesis of ZP120 peptide)
ΙT
     Peptides, preparation
     RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP
     (Preparation)
        (solid-phase synthesis of ZP120 peptide)
ΙT
     383123-18-0P, ZP120
     RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP
     (Preparation)
        (solid-phase synthesis of ZP120 peptide)
     108-24-7, Acetic anhydride
                                  71989-26-9 71989-38-3 143824-78-6
     154445-77-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (solid-phase synthesis of ZP120 peptide)
     1148034-99-4DP, resin-bound
                                  1148035-00-0P
ΤТ
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (solid-phase synthesis of ZP120 peptide)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
                  CAPLUS COPYRIGHT 2009 ACS on STN
L15
      992 ANSWERS
CC
     17 (Food and Feed Chemistry)
TΙ
     Production of coumaric acid from sugarcane bagasse
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end
=> s 115 and manufacture
        527696 MANUFACTURE
          1716 MANUFACTURES
        529074 MANUFACTURE
                 (MANUFACTURE OR MANUFACTURES)
       1168320 MANUF
          1889 MANUFS
       1169763 MANUF
                 (MANUF OR MANUFS)
       1322130 MANUFACTURE
                (MANUFACTURE OR MANUF)
L16
            64 L15 AND MANUFACTURE
=> s 116 and (ay<2004 or py<2004 or pry<2004)
       4802063 AY<2004
      24035998 PY<2004
       4275032 PRY<2004
L17
            41 L16 AND (AY<2004 OR PY<2004 OR PRY<2004)
=> s 117 narcotic
MISSING OPERATOR L17 NARCOTIC
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.
```

```
=> s 117 and (narcotic)
          8373 NARCOTIC
          6355 NARCOTICS
         12022 NARCOTIC
                 (NARCOTIC OR NARCOTICS)
L18
             0 L17 AND (NARCOTIC)
=> s 117 and fentanyl
          6679 FENTANYL
            19 FENTANYLS
          6682 FENTANYL
                 (FENTANYL OR FENTANYLS)
T.19
             0 L17 AND FENTANYL
=> d scan 117
L17
     41 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
CC
     59-5 (Air Pollution and Industrial Hygiene)
     Section cross-reference(s): 13, 38
TΙ
     Styrene exposure in the manufacture of fiber-glass-reinforced
     polyester products
     styrene occupational exposure fiber glass polyester; industrial
ST
     hygiene styrene fiber glass polyester; liver microsome cytochrome styrene
     urine glucarate
     Cytochromes
TΤ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (P; biol. monitoring of styrene exposure in manufacture of
        fiber-glass-reinforced polyester products)
ΙT
     Blood
     Hygiene, industrial
     Liver
     Urine
        (biol. monitoring of styrene exposure in manufacture of
        fiber-glass-reinforced polyester products)
     Polyesters, preparation
ΤТ
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (unsatd., biol. monitoring of styrene exposure in manufacture of
        fiber-glass-reinforced polyester products)
     9031-66-7, Transaminase
TΤ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (blood, pyruvic and oxaloacetic; biol. monitoring of styrene exposure
        in manufacture of fiber-glass-reinforced polyester products)
     9046-27-9, \gamma-Glutamyl transpeptidase
ΤТ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (blood; biol. monitoring of styrene exposure in manufacture of
        fiber-glass-reinforced polyester products)
     87-73-0, D-Glucaric acid
ΙT
     RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL
     (Biological study); FORM (Formation, nonpreparative)
        (urinary; biol. monitoring of styrene exposure in manufacture of
        fiber-glass-reinforced polyester products)
     106-60-5, \delta-Aminolevulinic acid
ΙT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (urine; biol. monitoring of styrene exposure in manufacture of
        fiber-glass-reinforced polyester products)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
    41 ANSWERS
                 CAPLUS COPYRIGHT 2009 ACS on STN
T.17
     17-6 (Food and Feed Chemistry)
CC
```

```
Preparative separation of value-added peptides from rice bran proteins by
TΙ
     high-performance liquid chromatography
ST
    rice bran peptide manuf flavor enhancer
ΙT
    Rice (Oryza sativa)
        (bran; preparative separation of value-added peptides from rice bran
        proteins by high-performance liquid chromatog.)
ΙT
     Condiments
        (flavor-enhancing; preparative separation of value-added peptides from rice
        bran proteins by high-performance liquid chromatog.)
     Peptides, biological studies
ΙT
     Proteins, general, biological studies
     RL: FFD (Food or feed use); PUR (Purification or recovery); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (rice bran; preparative separation of value-added peptides from rice bran
        proteins by high-performance liquid chromatog.)
ΙT
        (rice; preparative separation of value-added peptides from rice bran
        proteins by high-performance liquid chromatog.)
     9001-92-7, Proteinase
ΙT
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (preparative separation of value-added peptides from rice bran proteins by
        high-performance liquid chromatog.)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
                  CAPLUS COPYRIGHT 2009 ACS on STN
L17
      41 ANSWERS
CC
     22-7 (Physical Organic Chemistry)
     Section cross-reference(s): 5, 36, 40, 54, 60
     Kinetics and mechanism of the oxidation of ethyl xanthate and ethyl
ΤI
     thiocarbonate by hydrogen peroxide
ST
     kinetics oxidn Et xanthate thiocarbonate hydrogen peroxide
ΙT
    Mass spectrometry
        (HPLC combined with; kinetics and mechanism of oxidation of Et
        xanthate and Et thiocarbonate by hydrogen peroxide)
ΙT
    Addition reaction
        (O-; kinetics and mechanism of oxidation of Et xanthate and Et
        thiocarbonate by hydrogen peroxide)
TΤ
     Adsorption
        (O-Et S-oxodithiocarbonate on goethite; kinetics and mechanism of
        oxidation of Et xanthate and Et thiocarbonate by hydrogen peroxide)
ΙT
     Linear free energy relationship
        (acid-base catalysis, pH dependence of reaction kinetics; kinetics and
        mechanism of oxidation of Et xanthate and Et thiocarbonate by hydrogen
        peroxide)
TΤ
     Substitution reaction, nucleophilic
        (attack at O of hydrogen peroxide; kinetics and mechanism of oxidation of
        Et xanthate and Et thiocarbonate by hydrogen peroxide)
ΙT
     Sulfides, uses
     RL: CAT (Catalyst use); USES (Uses)
        (catalysts for xanthate autoxidn.; kinetics and mechanism of oxidation of
        Et xanthate and Et thiocarbonate by hydrogen peroxide)
     Sulfide minerals
TΤ
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); PYP (Physical process); PROC (Process)
        (extraction; kinetics and mechanism of oxidation of Et xanthate and Et
        thiocarbonate by hydrogen peroxide)
ΙΤ
     HPLC
```

Mass spectra Oxidation

Oxidation kinetics

```
Pesticides
     UV and visible spectra
     Viscose
        (kinetics and mechanism of oxidation of Et xanthate and Et thiocarbonate
        by hydrogen peroxide)
ΙT
     Rayon, reactions
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
        (kinetics and mechanism of oxidation of Et xanthate and Et thiocarbonate
        by hydrogen peroxide)
TΤ
    HPLC
        (mass spectrometry combined with; kinetics and mechanism of oxidation of
        Et xanthate and Et thiocarbonate by hydrogen peroxide)
     1310-14-1, Goethite
ТТ
     RL: NUU (Other use, unclassified); USES (Uses)
        (adsorption of O-Et S-oxodithiocarbonate on goethite; kinetics and
        mechanism of oxidation of Et xanthate and Et thiocarbonate by hydrogen
        peroxide)
     140-89-6, Potassium O-ethyl dithiocarbonate
ΤТ
                                                  151-01-9, Ethyl xanthate
     7722-84-1, Hydrogen peroxide, reactions 35832-93-0, Potassium O-ethyl
                    73085-96-8
     thiocarbonate
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant
     or reagent)
        (kinetics and mechanism of oxidation of Et xanthate and Et thiocarbonate
        by hydrogen peroxide)
     14265-45-3, Sulfite
                          14808-79-8, Sulfate, formation (nonpreparative)
ΙT
     RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
        (kinetics and mechanism of oxidation of Et xanthate and Et thiocarbonate
        by hydrogen peroxide)
ΙT
     44414-28-0
     RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical,
     engineering or chemical process); PRP (Properties); RCT (Reactant); FORM
     (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent)
        (mechanistic reaction intermediate; kinetics and mechanism of oxidation of
        Et xanthate and Et thiocarbonate by hydrogen peroxide)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end
=> s 117 and (reverse phase)
        268040 REVERSE
         10803 REVERSES
        277698 REVERSE
                 (REVERSE OR REVERSES)
       2003720 PHASE
        406942 PHASES
       2174252 PHASE
                 (PHASE OR PHASES)
         20073 REVERSE PHASE
                 (REVERSE (W) PHASE)
L20
             2 L17 AND (REVERSE PHASE)
=> d scan
L20
      2 ANSWERS
                CAPLUS COPYRIGHT 2009 ACS on STN
IC
     ICM C12N015-12
     ICS C12N015-85; C12N015-62; C12N015-90; C12N005-10; C07K014-505;
          A61K038-18
     3-2 (Biochemical Genetics)
CC
     Section cross-reference(s): 16
```

```
ΤI
     Production of erythropoietin by endogenous gene activation of human cells
ST
     erythropoietin manuf recombinant human cell cytomegalovirus
     immediate early promoter
ΙT
    Animal cell line
        (HT-1080; production of erythropoietin by endogenous gene activation of
        human cells)
ΙT
    Animal cell line
        (Namalwa; production of erythropoietin by endogenous gene activation of
        human cells)
ΙT
     HeLa cell
        (S3; production of erythropoietin by endogenous gene activation of human
        cells)
     Gene, animal
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (for erythropoietin, activation of; production of erythropoietin by
        endogenous gene activation of human cells)
ΤТ
     Recombination, genetic
        (homologous; production of erythropoietin by endogenous gene activation of
        human cells)
ΙT
     Animal cell
        (human; production of erythropoietin by endogenous gene activation of human
     Promoter (genetic element)
ΤТ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BUU
     (Biological use, unclassified); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (immediate early, of cytomegalovirus, for activation of erythropoietin
        gene; production of erythropoietin by endogenous gene activation of human
        cells)
ΙT
     Plasmid vectors
        (p189; production of erythropoietin by endogenous gene activation of human
        cells)
ΙT
    Fermentation
        (production of erythropoietin by endogenous gene activation of human cells)
TΤ
     Genetic element
     RL: BPR (Biological process); BSU (Biological study, unclassified); BUU
     (Biological use, unclassified); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (signal sequence, modified; production of erythropoietin by endogenous gene
        activation of human cells)
     Promoter (genetic element)
ΤТ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BUU
     (Biological use, unclassified); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (viral, for activation of erythropoietin gene; production of erythropoietin
        by endogenous gene activation of human cells)
ΙT
     75432-66-5, Blue Sepharose
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (Blue Sepharose; production of erythropoietin by endogenous gene activation
        of human cells)
     9002-03-3P, Dihydrofolate reductase
TΤ
     RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU
     (Biological study, unclassified); BIOL (Biological study); PREP
     (Preparation); PROC (Process)
        (gene for, as amplification gene; production of erythropoietin by
        endogenous gene activation of human cells)
     62213-36-9P, Neomycin phosphotransferase
ΙT
     RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU
```

```
(Biological study, unclassified); BIOL (Biological study); PREP
     (Preparation); PROC (Process)
        (gene for, as selectable marker; production of erythropoietin by endogenous
        gene activation of human cells)
ΙT
     11096-26-7P, Erythropoietin
     RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP
     (Preparation)
        (production of erythropoietin by endogenous gene activation of human cells)
ΙT
     72980-05-3
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (production of erythropoietin by endogenous gene activation of human cells)
     220271-95-4
                  220271-96-5 220271-97-6
                                               220271-98-7
ΙT
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (signal peptide N-terminus; production of erythropoietin by endogenous gene
        activation of human cells)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L20
     2 ANSWERS
                CAPLUS COPYRIGHT 2009 ACS on STN
CC
     59-5 (Air Pollution and Industrial Hygiene)
     Section cross-reference(s): 4, 50
ΤI
    Aerosol measurements in the workplace at a colored smoke munitions plant
    dye aerosol air occupational exposure; Solvent Yellow 33 occupational
ST
     exposure; smoke grenade manuf dye exposure
ΙT
     Air pollution
        (by Solvent Yellow 33-containing aerosols, occupational exposure to, in
        military smoke grenade-manufacturing plant)
ΙT
     Smoke
        (generation of colored, military grenades for, manufacture of, air
        pollution by aerosols containing Solvent Yellow 33 in, occupational
        exposure to)
ΙT
    Hygiene
        (industrial, in colored military smoke grenade manuf
        ., exposure to Solvent Yellow 33 in relation to)
ΙT
     Projectiles
        (smoke-generating, grenades, manufacture of, plant for, air
        pollution by aerosols containing Solvent Yellow 33 in, occupational
        exposure to)
     8003-22-3, Solvent Yellow 33
ΙT
     RL: POL (Pollutant); OCCU (Occurrence)
        (air pollution by aerosols containing, occupational exposure to, in
        military smoke grenade manufacturing plant)
ALL ANSWERS HAVE BEEN SCANNED
=> d his
     (FILE 'HOME' ENTERED AT 15:25:12 ON 23 JUL 2009)
     FILE 'REGISTRY' ENTERED AT 15:25:31 ON 23 JUL 2009
              1 S 437-38-7/RN
T.1
L2
              1 S 21409-26-7/RN
L3
              2 S L1 OR L2
     FILE 'CAPLUS' ENTERED AT 15:26:37 ON 23 JUL 2009
           5012 S L3
L4
              8 S L4 AND (LARGE SCALE)
L5
```

```
L6
              0 S L5 AND HPLC
L7
            606 S L4 AND (PROCESS OR PREPARATION)
L8
             19 S L7 AND HPLC
L9
              7 S L8 AND (PY<2004 OR AY<2004 OR PRY<2004)
L10
         310253 S INDUSTRIAL
L11
         98055 S (LARGE SCALE)
L12
        404445 S L10 OR L11
L13
         159874 S (PROCESS OR PREPARATION) AND L12
L14
             1 S KILOLAB
            992 S L13 AND HPLC
L15
             64 S L15 AND MANUFACTURE
L16
             41 S L16 AND (AY<2004 OR PY<2004 OR PRY<2004)
L17
              0 S L17 AND (NARCOTIC)
L18
T.19
              0 S L17 AND FENTANYL
L20
              2 S L17 AND (REVERSE PHASE)
=> s l1 (L) pur/rl
          4994 L1
        311825 PUR/RL
             4 L1 (L) PUR/RL
L21
=> d scan
                  CAPLUS COPYRIGHT 2009 ACS on STN
L21
     4 ANSWERS
CC
     4-2 (Toxicology)
     Isolation of phentanyl from cadaver organs by acetonitrile and acetone
ΤI
ST
     phentanyl isolation cadaver acetone acetonitrile; forensic phentanyl
     cadaver acetone acetonitrile
ΙT
     Brain
     Cadaver
     Legal chemistry and medicine
     Liver
        (phentanyl isolation from cadaver organs by acetonitrile and acetone)
ΙT
     437-38-7P, Phentanyl
     RL: ANT (Analyte); PUR (Purification or recovery); ANST
     (Analytical study); PREP (Preparation)
        (phentanyl isolation from cadaver organs by acetonitrile and acetone)
ΙT
     67-64-1, Acetone, biological studies
                                          75-05-8, Acetonitrile, biological
     studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (phentanyl isolation from cadaver organs by acetonitrile and acetone)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L21
      4 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
INCL -436
CC
     9-9 (Biochemical Methods)
     Section cross-reference(s): 1
TI
     Use of weak anion exchangers for cleanup and analysis of drugs and
     metabolites in biological matrices
ST
    matrix cleanup analysis drug metabolite weak anion exchanger
    Amniotic fluid
TT
     Bile
     Blood plasma
     Blood serum
     Body fluid
     Bone
     Eukaryota
     Feces
```

Hair Prokaryota Saliva Synovial fluid (anal.; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) ΙT Animal tissue (biopsy, autopsy, anal.; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) ΙT Heterocyclic compounds RL: NUU (Other use, unclassified); USES (Uses) (containing nitrogen, WAX comprising; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) ТТ Amines, uses RL: NUU (Other use, unclassified); USES (Uses) (primary, WAX comprising; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) ΤТ Body fluid (pus, anal.; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) TΤ Amines, uses RL: NUU (Other use, unclassified); USES (Uses) (secondary, WAX comprising; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) ΤT Amines, uses RL: NUU (Other use, unclassified); USES (Uses) (tertiary, WAX comprising; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) ΙT Blood analysis Drugs HPLC Human Liquid chromatography Mass spectrometry Microtiter plates Urine analysis (use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) TΤ Proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) ΙT Glass, uses RL: TEM (Technical or engineered material use); USES (Uses) (vials, WAX-coated; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) Anion exchangers ΙT (weak; use of weak ion exchangers for cleanup and anal. of drugs and metabolites in biol. matrixes) ΙT 50-36-2P, Cocaine 50-48-6P, Amitriptyline 50-55-5P, Reserpine 56-54-2P, Quinidine 57-27-2P, Morphine, analysis 72-69-5P, Nortriptyline 125-33-7P, Hexamidine 300-62-9P, Amphetamine 437-38-7P, Fentanyl 439-14-5P, Diazepam 486-12-4P, Triprolidine 504-29-0P, 2-Aminopyridine 525-66-6P, Propranolol 537-46-2P, MethylAmphetamine 604-75-1P, Oxazepam 1225-56-5P, 1668-19-5P, Doxepin 2784-73-8P, 6-Monoacetyl morphine Nordoxepin 4342-03-4P, Dacarbazine 4368-28-9P, Tetrodotoxin 6443-85-2P, 3-Pyridylacetonitrile 14357-76-7P, Dihydroetorphine

Selegiline 29975-16-4P, Estazolam 33069-62-4P, Paclitaxel 34391-04-3P, (R)-(-)-Salbutamol 36322-90-4P, Piroxicam

14611-51-9P,

37148-27-9P,

```
Clenbuterol 37394-31-3P, (R)-(-)-Terbutaline
                                                      52485-79-7P,
     Buprenorphine 53123-88-9P, Rapamycin 54910-89-3P, Fluoxetine
     65277-42-1P, Ketoconazole 84371-65-3P, Mifepristone
                                                           104987-11-3P,
           132539-06-1P, Olanzapine 188247-01-0P, Methylproamine
     RL: ANT (Analyte); PUR (Purification or recovery); ANST
     (Analytical study); PREP (Preparation)
        (use of weak ion exchangers for cleanup and anal. of drugs and
       metabolites in biol. matrixes)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
     4 ANSWERS
                 CAPLUS COPYRIGHT 2009 ACS on STN
     ICM C07D211-58
     ICS B01D015-08
    48-1 (Unit Operations and Processes)
     Section cross-reference(s): 27, 45, 63
     Industrial method for separation and purification of fentanyl by
     reverse-phase preparative chromatography
     fentanyl purifn reverse phase HPLC
     Acids, preparation
     RL: IMF (Industrial manufacture); PUR (Purification or recovery); PREP
     (Preparation)
        (fentanyl salts; industrial method for separation and purification of
fentanyl by
       reverse-phase preparative chromatog. with acid salification via
        neutralization)
     Reversed phase HPLC stationary phases
        (in an industrial method for separation and purification of fentanyl by
       reverse-phase preparative chromatog.)
     Reversed phase HPLC
        (industrial method for separation and purification of fentanyl by reverse-
phase
       preparative chromatog.)
    Neutralization
        (industrial method for separation and purification of fentanyl by reverse-
phase
       preparative chromatog. with acid salification via)
     Alcohols, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (solvents; in an industrial method for separation and purification of
fentanyl by
       reverse-phase preparative chromatog.)
     50-21-5, Lactic acid, reactions 110-15-6, Succinic acid, reactions
     144-62-7, Oxalic acid, reactions 7664-38-2, Phosphoric acid, reactions
     7664-93-9, Sulfuric acid, reactions 13598-36-2, Phosphorous acid,
     reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (in an industrial method for separation and purification of fentanyl by
        reverse-phase preparative chromatog.)
     1443-54-5P, Fentanyl hydrochloride
     RL: PEP (Physical, engineering or chemical process); PUR (Purification or
     recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
        (industrial method for separation and purification of fentanyl by reverse-
phase
       preparative chromatoq.)
     437-38-7P, Fentanyl
     RL: PEP (Physical, engineering or chemical process); PUR
     (Purification or recovery); PYP (Physical process); RCT (Reactant);
     PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
        (industrial method for separation and purification of fentanyl by reverse-
```

L21

IC

CC

ΤI

ST

ΙΤ

ΙT

TT

TΤ

TΤ

ΙT

ΙΤ

TΤ

```
phase
        preparative chromatog.)
ΙT
     64-18-6, Formic acid, reactions 64-19-7, Acetic acid, reactions
     87-69-4, Tartaric acid, reactions 7647-01-0, Hydrochloric acid,
     reactions 7697-37-2, Nitric acid, reactions
                                                     10035-10-6, Hydrogen
     bromide, reactions
     RL: RCT (Reactant); RGT (Reagent); RACT (Reactant or reagent)
        (industrial method for separation and purification of fentanyl by reverse-
phase
        preparative chromatoq.)
TΤ
     75-05-8, Acetonitrile, uses 75-65-0, tert-Butanol, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (solvent; industrial method for separation and purification of fentanyl by
        reverse-phase preparative chromatog.)
ΤТ
     7631-86-9D, Silica, silanized products
     RL: NUU (Other use, unclassified); USES (Uses)
        (stationary phase; in an industrial method for separation and purification
\circ f
        fentanyl by reverse-phase preparative chromatog.)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L21
     4 ANSWERS
                CAPLUS COPYRIGHT 2009 ACS on STN
CC
     71-6 (Nuclear Technology)
     Section cross-reference(s): 27
     Isotopic fractionation of fentanyl and its deuterated analogs by capillary
ΤI
     gas chromatography
ST
     isotopic fractionation fentanyl deuterated analog; capillary gas chromatog
     isotopic fractionation
ΙT
     Capillary gas chromatography
        (isotopic fractionation of fentanyl and its deuterated analogs by
        capillary gas chromatog.)
ΙT
     437-38-7P, Fentanyl 118357-29-2P 201415-22-7P
                                                         201415-23-8P
                                  201415-26-1P
     201415-24-9P
                  201415-25-0P
                                                  201415-27-2P
     RL: PUR (Purification or recovery); PREP (Preparation)
        (isotopic fractionation of fentanyl and its deuterated analogs by
        capillary gas chromatog.)
ALL ANSWERS HAVE BEEN SCANNED
=> d his
     (FILE 'HOME' ENTERED AT 15:25:12 ON 23 JUL 2009)
     FILE 'REGISTRY' ENTERED AT 15:25:31 ON 23 JUL 2009
              1 S 437-38-7/RN
T.1
L2
              1 S 21409-26-7/RN
L3
              2 S L1 OR L2
     FILE 'CAPLUS' ENTERED AT 15:26:37 ON 23 JUL 2009
           5012 S L3
L4
              8 S L4 AND (LARGE SCALE)
L5
L6
              0 S L5 AND HPLC
L7
            606 S L4 AND (PROCESS OR PREPARATION)
L8
             19 S L7 AND HPLC
L9
              7 S L8 AND (PY<2004 OR AY<2004 OR PRY<2004)
L10
         310253 S INDUSTRIAL
         98055 S (LARGE SCALE)
L11
         404445 S L10 OR L11
L12
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L13 159874 S (PROCESS OR PREPARATION) AND L12
       1 S KILOLAB
L14
L15
          992 S L13 AND HPLC
L16
           64 S L15 AND MANUFACTURE
           41 S L16 AND (AY<2004 OR PY<2004 OR PRY<2004)
L17
L18
            0 S L17 AND (NARCOTIC)
L19
            0 S L17 AND FENTANYL
L20
            2 S L17 AND (REVERSE PHASE)
L21
            4 S L1 (L) PUR/RL
=> s l1 (L) prep/rl
         4994 L1
      4815099 PREP/RL
        66 L1 (L) PREP/RL
L22
=> s 122 and (chromato?)
      867288 CHROMATO?
            4 L22 AND (CHROMATO?)
L23
=> s 123 not 121
      0 L23 NOT L21
L24
=> log off
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
```

STN INTERNATIONAL LOGOFF AT 16:15:11 ON 23 JUL 2009